# ENTOMOLOGY AS A HOBBY

UNIVERSITY OF MARYLAND

ROBERT W. RUSSELL

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SUMMARY OF THESIS

I. Introduction

A. Brief discussion of Entomology

B. Benefits to be derived from Entomology

II. Discussion of the life cycle of a typical insect, the Polyphemus moth, in order to give an idea of just what can be seen and learned in the study of insects

III. Conclusion- statement of the particular appeal of Entomology to the Engineer

# ENTOMOLOGY AS A HOBBY

## INTRODUCTION

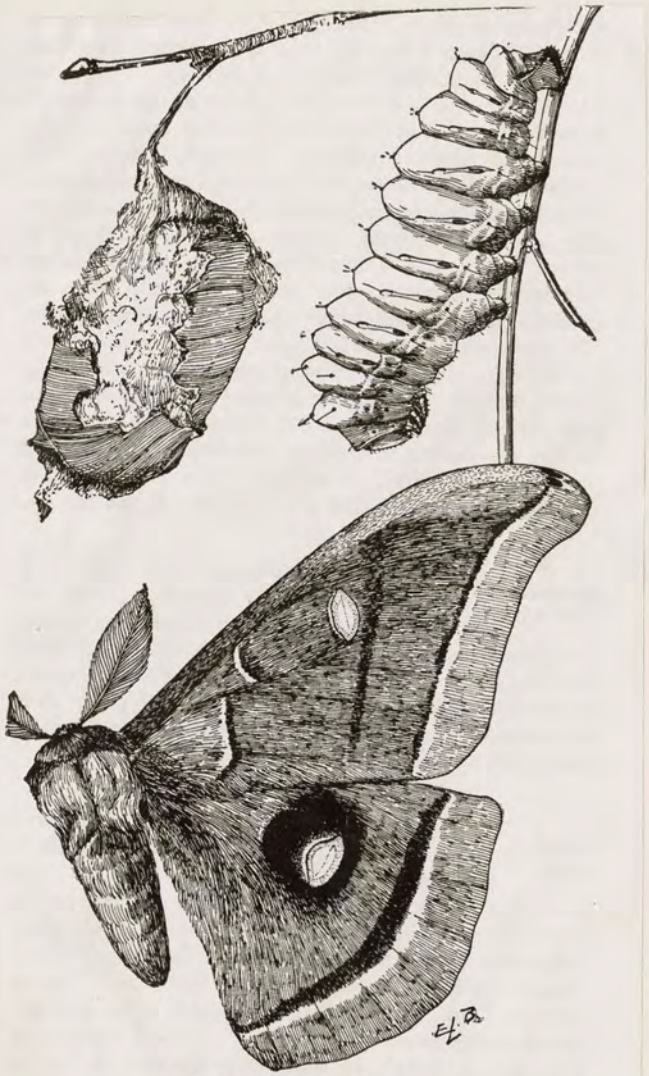
The hobby of Entomology (Insect Study) is the source of a wealth of highly interesting information and the means by which leisure hours may be spent pleasurably for anyone who is endowed with a little curiosity and a pronounced lack of repugnance for handling "bugs." The unusual habits, the marvelous transformations, the amazing feats of insects are a constant wonder to the observer. The field of Entomology is always new; every species of insect can be studied indefinitely without repitition, and there are about six hundred thousand species, thousands of which are within reach of the average person. The writer is mainly interested in actually raising and observing insects, since he feels that the fullest enjoyment of this avocation is thus obtained. For this reason the discussion is limited to the raising of insects.

## DISCUSSION OF A TYPICAL INSECT

A typically interesting insect, and one which may be easily raised, is the Polyphemus moth (Telea Polyphemus). The large brown cocoons spun by the "larvae" are easily collected in winter from the branches of trees. Dissection of one of these cocoons reveals the "pupa" of the moth, a brown object about three-quarters of an inch long and possessing no external organs. From this pupa, the moth emerges

in the late spring. At emergence, the adult insect is a slimy, misshapen object, tottering feebly about and futilely waving its dwarfed wings. An hour later this same moth has undergone an almost unbelievable change. What was a short time ago a helpless, bedraggled creature now sits proudly fanning its wings and preening its antennae- truly a thing of beauty. The wings, which are about four inches across, are brown with a pink tinge and bordered with white and black stripes. On each wing is a transparent "eye spot", each spot suggesting the single eye of the legendary giant, Polyphemus, from whom the moth got its name. However, this regal splendor is short lived, for the moth has no mouthparts with which to eat, perforce starving to death. The male moth possesses a mating instinct so strong that it can locate the female from distances of a mile or more. Probably the long feathery antennae of the male are somehow employed in doing this. Collectors make a practice of putting females outdoors in a screened box overnight; for by the next morning, one or two male specimems will probably be found near by. Almost as strong as the mating instinct is for the male, is the urge of the fertile female to lay eggs. The rather large, brown-rimmed eggs are deposited wherever the fertile female chances to light; in fact, the writer has had them deposited on his hand. The eggs hatch following an incubation period of about ten days. The green larvae or caterpillars which hatch from these eggs have tremendous appetites. With but short pauses,

PLATE



Telea polyphemus

the larva eats continually until it attains its full size of four inches. At this time the silken cocoon is spun and the larva changes to a pupa, in which state the winter is spent. The life cycle given above is but a bare outline of what may be learned from raising this insect, for the complete story would literally fill a book. Cycles such as these have been observed by the writer for many insects. There is a minimum of time and trouble involved, and a maximum of interest and enjoyment gained.

## CONCLUSION

As an aspirant to the Engineering profession, the writer is struck, even more forcibly than most, by the wide divergence between Engineering and Entomology. The cause and effect relationship so prominent in Engineering is difficult, if not impossible, to detect in Entomology. The big equal mark which is more or less constantly in the front of the Engineering mind is nowhere to be seen in Entomology. Thus, Entomology could not only be a good hobby for the Engineer but could exert a considerable broadening effect on his viewpoint and greatly widen his horizon.

Respectfully submitted,
Robert W. Russell

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